

CLAIMS

1. A method, including steps of
examining a plurality of mirrored file system volumes for a consistency
point value;
determining a most up-to-date said file system volume in response to said
steps of examining; and
selecting a set of changed file blocks between said up-to-date said file sys-
tem and each one of said plurality of mirrored file system volumes.

2. A method as in claim 1, wherein said steps of selecting include
determining a snapshot held in common between said most up-to-date said
file system volume and at least one of said plurality of mirrored file system volumes; and
selecting those file blocks changed between said snapshot held in common
and said up-to-date said file system volume.

3. A method as in claim 1 or 2, including steps of re-synchronizing at
least one of said plurality of mirrored file system volumes in response to said steps of se-
lecting.

4. Apparatus including

1 a plurality of mirrored file system volumes, each having at least one snap-
2 shot including an entire consistent file system, each said snapshot having a consistency
3 point value;

4 a first comparison element capable of being coupled to a plurality of said
5 consistency point values;

6 a second comparison element, responsive to an output of said first compari-
7 son element, said second comparison element being capable of being coupled (a) to a first
8 snapshot associated with said output on a first said volume and (b) to a second snapshot
9 associated with a second said volume, said second comparison element being capable of
10 providing a selection of file blocks in response thereto.

11
12 5. Apparatus as in claim 4, wherein said second snapshot is held in
13 common between said first volume and said second volume.

14
15 6. Apparatus as in claim 4 or 5, including an element capable of re-
16 synchronizing at least one of said plurality of mirrored file system volumes in response to
17 said second comparison element.